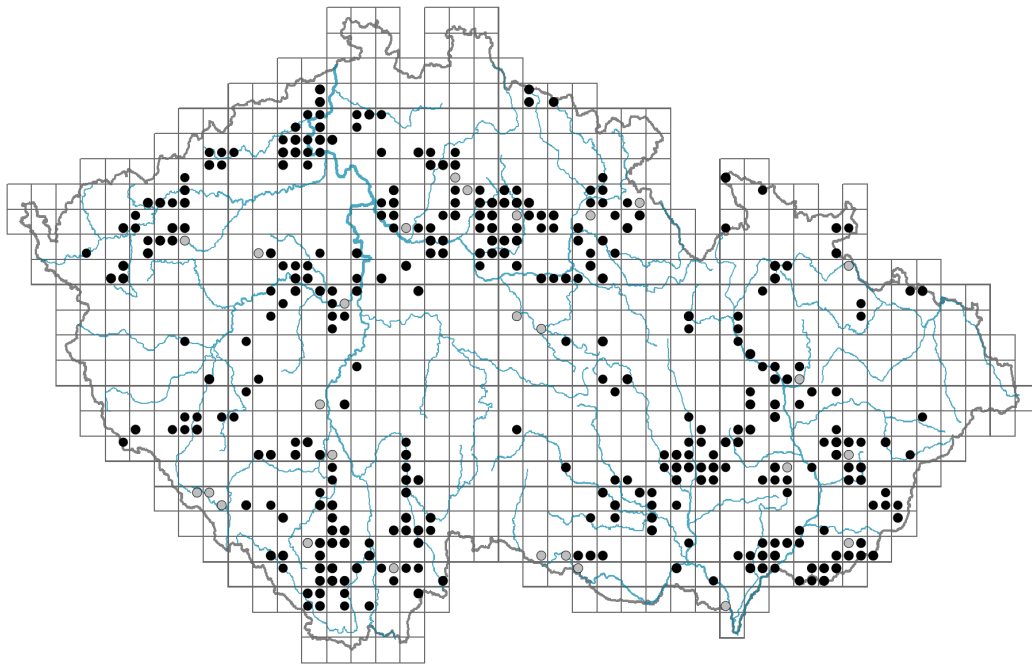


# *Dianthus superbus*

## Distribution



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### Map info

● revised records

● unrevised records

On the map are not visualized records without the coordinates and records marked as incorrect or doubtful.



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## Habitus and growth type

Height [m]: **0.3-0.7**

Growth form: **polycarpic perennial non-clonal herb**

Life form: **hemicryptophyte**

Life strategy: **CSR - competitor/stress-tolerator/ruderal**

Life strategy (Pierce method based on leaf traits): **R/CSR**

Life strategy (Pierce method, C-score): **17.6 %**

Life strategy (Pierce method, S-score): **22.2 %**

Life strategy (Pierce method, R-score): **60.3 %**

## Leaf

Leaf presence and metamorphosis: **leaves present, not modified**

Leaf arrangement (phyllotaxis): **opposite, rosulate**

Leaf shape: **simple - entire**

Stipules: **absent**

Petiole: **absent**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic, helomorphic**

## Flower

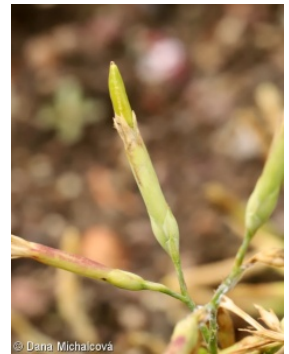
Flowering period [month]: **June-September**

Flowering phase: **7 Ligustrum vulgare-Stachys sylvatica (end of early summer)**  
 Flower colour: **white, pink, pink-violet**  
 Flower symmetry: **actinomorphic**  
 Perianth type: **calyx and corolla**  
 Perianth fusion: **free**  
 Calyx fusion: **synsepalous**  
 Inflorescence type: **dichasium**  
 Dicliny: **gynomonoecious, gynodioecious**  
 Generative reproduction type: **facultative allogamy**  
 Pollination syndrome: **insect-pollination**



### Fruit, seed and dispersal

Fruit type: **dry fruit - capsule**  
 Fruit colour: **brown**  
 Reproduction type: **by seed/spores and vegetatively**  
 Dispersal unit (diaspore): **seed**  
 Dispersal strategy: **Allium (mainly autochory)**  
 Myrmecochory: **non-myrmecochorous (b)**



### Belowground organs and clonality

Shoot metamorphosis: **stolon, pleiocorm**  
 Root metamorphosis: **primary storage root**  
 Storage organ: **stolon, pleiocorm, primary storage root**  
 Type of clonal growth organ: **hypogeogenous rhizome**  
 Freely dispersible organs of clonal growth: **absent**  
 Shoot life span (cyclicality): **dicyclic or polycyclic shoots prevailing**  
 Branching type of stem-derived organs of clonal growth: **sympodial**  
 Primary root: **present**  
 Persistence of the clonal growth organ [year]: **4**  
 Number of clonal offspring: **1**



Lateral spreading distance by clonal growth [m]: **0.4**

### Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **5**  
 Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **10**  
 Number of buds per shoot at a depth greater than 10 cm (root buds excluded): **0**  
 Size of the belowground bud bank (root buds excluded): **15**  
 Depth of the belowground bud bank (root buds excluded) [cm]: **4**  
 Number of buds per shoot at the soil surface (root buds included): **5**  
 Number of buds per shoot at a depth of 0–10 cm (root buds included): **10**  
 Number of buds per shoot at a depth greater than 10 cm (root buds included): **0**  
 Size of the belowground bud bank (root buds included): **15**  
 Depth of the belowground bud bank (root buds included) [cm]: **4**



### Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**  
 Carnivory: **non-carnivorous**

Symbiotic nitrogen fixation: **no nitrogen-fixing symbionts**

## Karyology

Chromosome number (2n): **30**

Ploidy level (x): **2**

2C genome size [Mbp]: **1325.76**

1Cx monoploid genome size [Mbp]: **662.88**

## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **6 - transition between values 5 and 7; rarely at less than 20% of diffuse radiation incident in an open area**

Temperature indicator value: **5 - moderate heat indicator, occurring from lowland to montane belt, mainly in submontane-temperate areas**

Moisture indicator value: **7 - humidity indicator, focus on well moistened, but not wet soils**

Reaction indicator value: **7 - indicator of slightly acidic to slightly basic conditions, never occurring in very acidic conditions**

Nutrient indicator value: **3 - occurring at nutrient-poor sites more frequently than at average sites and exceptionally at rich sites**

Salinity indicator value: **0 - not salt tolerant, glycophyte**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-1.61**

Herb layer disturbance frequency indicator value: **-0.57**

Whole-community disturbance severity indicator value: **0.25**

Herb layer disturbance severity indicator value: **0.2**

Whole-community structure based disturbance indicator value: **0.29**

Herb layer structure-based disturbance indicator value: **0.32**

## Habitat and sociology

Occurrence in habitats

1 Vegetation of cliffs, screes and walls

1B Siliceous cliffs and block fields: **2 - optimum**

2 Alpine and subalpine grasslands

2B Subalpine tall-forb and tall-grass vegetation: **1 - rare occurrence**

5 Vegetation of springs and mires

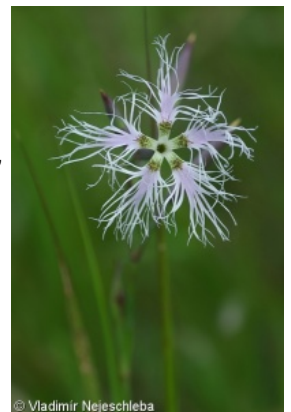
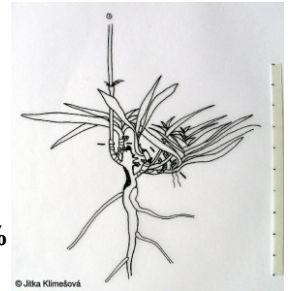
5D Calcareous fens: **1 - rare occurrence**

6 Meadows and mesic pastures

6E Wet Cirsium meadows: **1 - rare occurrence**

6F Intermittently wet Molinia meadows: **2 - optimum**

7 Acidophilous grasslands



7A Subalpine and montane acidophilous grasslands: **1 - rare occurrence**

12 Forests

12I Sub-continental thermophilous oak forests: **2 - optimum**

12K Acidophilous oak forests: **2 - optimum**

Diagnostic taxon

Diagnostic taxon of classes: [AC Elyno-Seslerietea](#)

Diagnostic taxon of alliances: [ACA Agrostion alpinae](#)

Diagnostic taxon of associations: [ACA01 Saxifraga oppositifoliae-Festucetum versicoloris](#), [LCC03 Melico pictae-Quercetum roboris](#)

Constant taxon

Constant taxon of associations: [ACA01 Saxifraga oppositifoliae-Festucetum versicoloris](#)

Ecological specialization indices

Ecological specialization index for all vegetation types: **4.6**

Ecological specialization index for non-forest vegetation: **4.4**

Ecological specialization index for forest vegetation: **5.7**

Colonization ability

Index of colonization success (ICS): **1**

## Distribution and frequency

Floristic zone: **boreal, northern temperate, southern temperate, submeridional, meridional**

Floristic region: **Europe, Asia**

Elevational belt in the Czech Republic: **lowlands, colline belt, submontane belt, montane belt, subalpine belt**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: 231

taxon.data.freq\_in\_quad: 385

Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.1 %**

Occurrence frequency in vegetation plots with a cover above 5%: **0 %**

Occurrence frequency in vegetation plots with a cover above 25%: **0 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0 %**

Mean percentage cover in vegetation plots: **2 %**

Maximum percentage cover in vegetation plots: **3 %**

Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **8**

Number of narrow habitats in which the taxon has its optimum: **4**

Number of broad habitats in which the taxon occurs: **6**

Number of broad habitats in which the taxon has its optimum: **3**

## Threats and protection

Red List 2017 (national categories): **C2t - endangered taxon, declining**

Red List 2017 (IUCN categories): **EN - endangered**

Legal protection: **endangered taxon**



